

What is claimed is:

1. ~~A wallboard, comprising:~~

a first member;

a second member; and

a composition disposed between said first and second members, wherein said

5 composition is made using at least:

(a) fly ash in the range of about 60%-66% by weight;

(b) water; and

(c) at least a first binder.

2. ~~A wallboard, as claimed in Claim 1, wherein:~~

said water is in the range of about 31%-37% by weight and said at least first binder
is in the range of about 1.8%-2.4% by weight.

3. A wallboard, as claimed in Claim 1, wherein:

said composition has a second binder that is part of a foamable solution that includes
portions of said water and said second binder being one of: compatible with and equivalent
to said first binder.

4. A wallboard, as claimed in Claim 1, wherein:

~~portions of said water and said at least first binder are provided in a binder solution~~

and remaining portions of said water and a second binder that is one of: compatible with and equivalent to said first binder are provided as part of a foamable solution.

5. A wallboard, as claimed in Claim 1, wherein:

said composition includes a fiber material that is less than 1% by weight of said composition.

6. A wallboard, as claimed in Claim 1, wherein:

~~said at least first binder is different from polyvinyl acetate.~~

7. A wallboard, as claimed in Claim 1, wherein:

said composition when made consists essentially of said fly ash, a binder solution that includes parts of said water and parts of said at least first binder and a foamable solution that includes remaining portions of said water and remaining portions of said at least first binder.

8. A wallboard, as claimed in Claim 1, wherein:

said wallboard has a nail pull strength of between about 80.0 to 130.0 (lbs.) and a density between about 0.58 to 0.79 (gm/ml).

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9. A wallboard, as claimed in Claim 1, wherein:

~~said composition has a viscosity in the range of about 600,000 to 1,500,000~~

centipoise when said composition is initially disposed between said first and second members.

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10. A method for making wallboard, comprising:

combining at least fly ash, water and at least a first binder to provide a composition having a viscosity;

joining first and second members to upper and lower portions of said composition

5 when said viscosity is at least about 600,000 centipoise; and

~~completing said wallboard after said joining step~~

11. A method, as claimed in Claim 10, wherein:

said at least first binder is part of a binder solution that includes at least portions of said water and remaining portions of said water being part of a foamable substance and in which said foamable substance includes a second binder that is one of: compatible with and
5 equivalent to said first binder.

12. A method, as claimed in Claim 11, wherein:

each of said first binder and said second binder is different from polyvinyl acetate and includes polyvinyl alcohol.

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13. A method, as claimed in Claim 10, wherein:

at least portions of said at least first binder are part of a binder solution with first portions of said water and remaining portions of said at least first binder are part of a foamable solution with second portions of said water and said combining step includes introducing separately each of said fly ash, said binder solution and said foamable solution to a mixer.

14. A method, as claimed in Claim 10, wherein:

said joining step includes locating said first member on a conveyor and receiving portions of said composition in a slurry on said first member and subsequently locating said second member on said portions of said composition.

15. A method, as claimed in Claim 10, wherein:

said combining step includes monitoring viscosity of said composition output from a mixer.

16. A method, as claimed in Claim 10, wherein:

said combining step includes controlling using a control system at least one of a first pump mechanism and a first valve device in communication with at least a first vessel containing at least some of said at least first binder.

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17. A method, as claimed in Claim 16, wherein:

~~said combining step includes outputting a desired amount of said fly ash from a~~
second vessel containing at least said fly ash using said control system.

18. A method, as claimed in Claim 17, wherein:

said combining step includes regulating production of a foamable substance that includes at least some of said water using said control system and at least one of a second valve device and a second pump mechanism.

19. A method, as claimed in Claim 10, wherein:

~~said completing step includes preheating said composition and said first and second~~
members and in which, during said preheating step, said composition expands.

20. A method, as claimed in Claim 19, wherein:

said completing step includes heating said composition and said first and second members after said preheating step and in which any expansion of said composition during said heating step is less than said expansion during said preheating step.

21. A method, as claimed in Claim 10, wherein:

said completing step includes preheating said composition and said first and second members and in which, during said preheating step, said composition has bubbles and in

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5 which at least a majority of said bubbles have a thickness that enable them to maintain
holding air during said preheating step.

22. A method, as claimed in Claim 10, wherein:
after said completing step, said composition is essentially homogenous in that, for
each cross-section thereof, an area of .1 square inch is essentially the same as any other area
of .1 square inch.

23. A method, as claimed in Claim 10, wherein:
said combining step includes introducing fibers to said composition in an amount less
than 1% by weight

24. A method, as claimed in Claim 10, wherein:
during said combining step, said fly ash is in the range of about 60%-66% by weight,
said water is in the range of about 31%-37% by weight and said at least first binder is in the
range of about 1.8%-2.4% by weight.

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